



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,848	11/13/2003	Tomomi Sano	50395-235	4898
7590 11/29/2004				
McDERMOTT, WILL & EMERY		EXAMINER		
600 13th Street, N.W.		SPECTOR, DAVID N		
Washington, DC 20005-3096				
		ART UNIT	PAPER NUMBER	
		2873		

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/705,848	Applicant(s) SANO ET AL.	
	Examiner David N. Spector	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003 and 11 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 12 is/are rejected.
- 7) ☒ Claim(s) 5-11, 13 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20040311</u> . | 6) <input checked="" type="checkbox"/> Other: <u>DETAILED ACTION</u> . |

DETAILED ACTION – NONFINAL REJECTION***Claims - Objections***

Claims 1 and 2 are objected to for improperly using a definite article (*i.e.* the) in connection with the first-mention of “fixing portion”, in the third line of claim 1. This objection could be overcome by replacing said definite article with its indefinite form.

Claims 8-11 are objected to because the patentability of a claim to a device is not dependent on the method (e.g. laser welding) employed to make said device. This objection could be overcome by amending claims 8-11 to depend from independent claim 12.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Houle (U.S. Patent No. 4,381,884).

In regard to claim 1 Houle discloses a fixing member **42** (*e.g. the so-called “sphere-like element” included in the adjustable holder 10 of Houle*) for fixing an optical element **18** to a substrate (*e.g. although not expressly articulated in Houle, the adjustable holder 10 disclosed therein is inherently designed to be mounted or otherwise disposed upon a flat supporting substrate, as evidenced by the flat-bottom wall 26 of the base 12 of the holder 10 shown in FIG. 1*) said fixing member **42** holding the optical element **18** therein and the bottom surface **52** of said fixing member **42** being spherical so as to touch the fixing portion **12** (*e.g. the so-called base*) of said substrate at the edge of an opening **38** of said fixing portion **12** (col. 3, ln. 26-64; **FIG. 1**). Claim 1 is therefore anticipated by Houle.

In regard to claim 2 Houle discloses a fixing member **42** according to claim 1 from which claim 2 depends; wherein said fixing member **42** is made of metal (col. 3, ln. 47-49). Claim 2 is therefore anticipated by Houle.

Art Unit: 2873

In regard to claim 3 Houle discloses an optical device **10** having a substrate (e.g. *although not expressly articulated in Houle, the adjustable holder 10 disclosed therein is inherently designed to be mounted or otherwise disposed upon a flat supporting substrate, as evidenced by the flat-bottom wall 26 of the base 12 of the holder 10 shown in FIG. 1*) and an optical element **18** fixed to said substrate with a fixing member **42**, said fixing member **42** holding the optical element **18** therein and the bottom surface **52** of said fixing member **42** being spherical to touch a fixing portion **12** (e.g. *the so-called base*) of said substrate at the edge of an opening **38** of said fixing portion **12** (col. 3, ln. 26-64; **FIG. 1**). Claim 3 is therefore anticipated by Houle.

In regard to claim 12 Houle discloses, by example, a method for making an optical device **10** in which an optical element **18** is fixed to a substrate with a fixing member **42** comprising: preparing a substrate (e.g. *although not expressly articulated in Houle, the adjustable holder 10 disclosed therein is inherently designed to be mounted or otherwise disposed upon a flat supporting substrate, as evidenced by the flat-bottom wall 26 of the base 12 of the holder 10 shown in FIG. 1*) having an opening in a fixing portion **12** (e.g. *the so-called base*) thereof, and a fixing member **42** holding the optical element **18** therein, the bottom surface **52** of said fixing member **42** being spherical (col. 3, ln. 26-64; **FIG. 1**); adjusting a direction of said fixing member **42** while the spherical bottom surface of said bottom surface **52** is in contact with the edge of the **38** of said fixing portion **12** (col. 4, ln. 26-47; **FIG. 7**) of the substrate; and fixing said fixing member **42** to said fixing portion **12** (col. 4, ln. 47-64; **FIG. 5-6**). Claim 12 is therefore anticipated by Houle.

Claim Rejections - 35 USC § 102/103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Remy De Graffenried et al. (U.S. Patent No. 6,554,244).

In regard to claim 1 Remy De Graffenried et al. discloses a fixing member (col. 8, ln. 54-65, col. 9, ln. 41-50; **FIG. 1**, ref. **3**, **FIG. 2**, ref. **20**) for fixing an optical element **28** to a substrate **2**, said

Art Unit: 2873

fixing member **20** holding the optical element **28** therein and the bottom surface **21** of said fixing member **20** being spherical (col. 3, ln. 36-47) so as to touch the fixing portion **8** (e.g. the fixing member of Remy De Graffenried et al. is a column of solidified solder) of said substrate **2** at the edge of an opening of said fixing portion **8** (e.g. the opening of Remy De Graffenried et al. is defined by the peripheral opening of the depression formed at the top of said solder column). Claim 1 is therefore anticipated by Remy De Graffenried et al.

In regard to claim 2 Remy De Graffenried et al. discloses a fixing member **20** according to claim 1 from which claim 2 depends; wherein said fixing member **20** is made of metal (col. 2, ln. 17-19). Claim 2 is therefore anticipated by Remy De Graffenried et al.

In regard to claim 3 Remy De Graffenried et al. discloses an optical device (col. 8, ln. 54-65, col. 9, ln. 41-50; FIG. 1, ref. 3, FIG. 2, ref. 20) having a substrate **2** and an optical element **28** fixed to said substrate **2** with a fixing member **20**, said fixing member **20** holding the optical element **28** therein and the bottom surface **21** of said fixing member **20** being spherical (col. 3, ln. 36-47) to touch a fixing portion **8** of said substrate **2** at the edge of an opening of said fixing portion **8** (e.g. the fixing member of Remy De Graffenried et al. is a column of solidified solder and the opening therein is defined by the peripheral opening of the depression formed at the top of said solder column). Claim 3 is therefore anticipated by Remy De Graffenried et al.

In regard to claim 4 Remy De Graffenried et al. discloses a fixing member **42** according to claim 3 from which claim 4 depends; wherein said fixing portion **8** is a cylindrical pedestal fixed to the substrate **2** (e.g. the fixing member of Remy De Graffenried et al. is a column of solidified solder which clearly forms a pedestal). Claim 4 is therefore anticipated by Remy De Graffenried et al.

Allowable Subject Matter

Claims 5-7 and 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other Remarks/Information

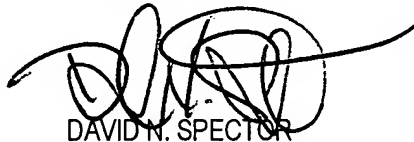
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications

Art Unit: 2873

is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any other inquiry concerning this communication or earlier communications from the examiner should be directed to David N. Spector whose telephone number is (571) 272-2338. The examiner can normally be reached at this number Monday through Friday between 6:00 AM and 2:30 PM. The fax number for the organization where this application is assigned is (703) 872-9306.

November 16, 2004



DAVID N. SPECTOR
PRIMARY EXAMINER